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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,872	02/10/2004	Bao Ha	Serie 5545	3882
40582	7590	11/26/2007		
AIR LIQUIDE Intellectual Property 2700 POST OAK BOULEVARD, SUITE 1800 HOUSTON, TX 77056			EXAMINER MCGUTHRY BANKS, TIMA MICHELE	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 11/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/776,872

Applicant(s)

HA ET AL.

Examiner

Tima M. McGuthry-Banks

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS; WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

Claim 13 is amended, Claims 14-17 are as previously presented, and Claim 18 is new.

Terminal Disclaimer

The terminal disclaimer filed on 17 September 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. 6,692,549 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Magnet et al (US 6,062,043) in view of Rathbone (US 5,268,019) as stated in the prior office action mailed 8 May 2007.

Regarding the new claimed feature of an additional compressed air separation unit feed air stream, a mere duplication of parts has no patentable significance unless a new and unexpected result is produced and is an obvious modification. See § 2144.04 VI B. With respect to the process limitation of producing a further compressed air stream, the manner of operating the device does not differentiate the apparatus claim from that of the disclosed prior art. See MPEP § 2114.

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Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Magnet et al in view of Rathbone '019 as applied to claim 13 above, and further in view of Rathbone (US 5,317,862).

Magnet et al in view of Rathbone '019 disclose the invention substantially as claimed. Though Magnet et al teaches producing a volume of 6700 m³ in column 2, lines 45-47, Magnet et al in view of Rathbone '019 does not specifically disclose a pressure of 20 bar as claimed. Rathbone '862 teaches an air separation unit used with a blast furnace. The compressor of a gas turbine typically has an outlet pressure in the order of 10-20 atm (20.1235-20.265 bar), which is in excess of that required by the air separation process when the oxygen is taken from the lower pressure stage of the double rectification column at a pressure a little above atmospheric (column 1, lines 46-52). It would have been obvious to one of ordinary skill in the art at the time the invention was made achieve an outlet pressure of 20 bar from the air separation unit as claimed, since Rathbone '862 teaches operating the lower pressure stage above atmospheric pressure allows for oxygen to be obtained at about atmospheric pressure. Additionally, the operating efficiency benefits from this elevated pressure (column 1, lines 30-45).

Response to Arguments

Applicant's arguments filed 17 September 2007 have been fully considered but they are not persuasive. Applicant's argument that the new claimed limitation of a further compressed air separation unit feed air stream does not read over the stated prior art, as stated above in the rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tima M. McGuthry-Banks whose telephone number is (571) 272-2744. The examiner can normally be reached on M-F 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TMN

20 November 2007


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700